

**REMARKS**

At the outset, Applicants' Attorney would like to thank Examiner Naff for all the time and courtesies extended during the telephonic interview of July 28, 2004. During the interview, the Examiner indicated that if Applicants changed "directional" in claim 1, line 6 to "uni-axial", cancelled claims 7, 22 and 24, and changed "28" to "28.2" and "113" to "113.4" in claims 23 and 25, the application should be in condition for allowance.

Entry of the foregoing amendments to the application is requested on the grounds that the claims, as amended, patentably distinguish over the cited art of record or, alternatively, place the application in better condition for appeal. The claims more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. No new issues have been added which would require further consideration and/or search, nor has any new matter been added. The claims as amended are believed to avoid the rejections applied in the Final Office Action for reasons set forth more fully below.

The Office Action of May 5, 2004 has been received and carefully reviewed. It is submitted that, by this Communication, all bases of rejection and objection are traversed and overcome. Upon entry of this Communication, Claims 1-6, 8-21, 23 and 25 remain in the application. Claims 7, 22 and 24 are cancelled. Reconsideration of the claims as amended is requested.

Claims 1-25 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner states that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Examiner further states that the specification contains inadequate support for a directional temperature gradient extending along a predetermined axis from a first region of the composition at a second temperature to a second region of the composition at a third temperature as required by claim 1.

Applicants do not agree with the Examiner's assertion that there is inadequate support in the specification for the claim language cited by the Examiner. The Examiner's attention was directed to the Applicants' specification at page 9, paragraph 51 during the telephonic interview referred to above, and the Examiner agreed that there was support in the specification. Further, although Applicants submit that "directional" was fully supported by

the specification as filed, in order to expedite prosecution, Applicants have revised claim 1 to recite a "uni-axial" temperature gradient as requested by the Examiner, and as also described in the specification as originally filed on page 9, paragraph 51.

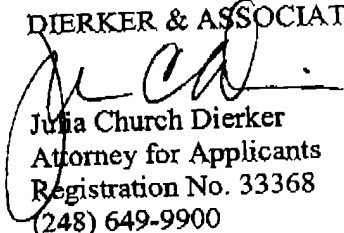
The Examiner also states that the ranges of claims 22-25 are not readily apparent in the specification. Although Applicants do not acquiesce to the Examiner's assertion, in order to expedite prosecution, Applicants have cancelled claims 22 and 24 and have amended claims 23 and 25 to recite that each of the plurality of micro-tubules has a diameter ranging between about "28.2" micrometers and about "113.4" micrometers, per the Examiner's request. Support for these amendments may be found as the high and low values in Table 3 in the specification as filed. Still further, claims 23 and 25 have been amended to depend from claims 1 and 20, respectively.

In summary, claims 1-6, 8-21, 23, and 25 remain in the application. Claims 7, 22, and 24 are cancelled. It is submitted that, through this amendment, Applicants' invention as set forth in these claims is now in a condition suitable for allowance, notification of which is respectfully requested. Should the Examiner believe otherwise, it is submitted that the claims as amended qualify for entry as placing the application in better form for appeal.

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, he is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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